

**REMARKS**

Claim 11 is currently pending in the application. By this amendment, claim 11 is amended. The foregoing separate sheets marked as “Listing of Claims” show all the claims in the application, with an indication of the current status of each. Spelling errors in the specification are corrected by this amendment.

Figure 5 illustrates an exemplary version of Applicant’s retail store replenishment system, having three autonomous business process robots, a retail store, a retail headquarters, and a distribution center. Figure 5 demonstrates the autonomic feature of the Applicant’s system, which is adept to monitor the execution and analyze the execution’s performance in order to self-manage the system by creating and implementing new more appropriate plans. *See also, e.g.,* Specification, at p. 2, line 14, through line 17. Applicant’s autonomous system is not limited to internal variations, but also receives information from the outside world and incorporates these outside business changes into the self-created plan. *See* Specification, at p. 12, line 16, through line 19. In light of Applicant’s autonomous quality to the system, Applicant’s invention is able to avoid the high cost of manual changes by human involvement. *See* Specification, at p. 1, line 19, through, p. 2, line 4.

**Claim Objections**

Examiner has objected to claim 11 due to the inadvertent misspelling of the word “one” as “on” in the twenty-seventh line of the claim. Claim 11 has hereby been amended by correcting the word “on” so that claim 11 now appropriately recites “at least one retail store.”

Applicant submits that this amendment does not add any new matter to the application, being entirely formal in nature, and respectfully requests entry of this amendment and withdraw of this objection.

**Claim Rejections – 35 USC § 112**

Claim 11 stands rejected under 35 USC § 112 as having insufficient antecedent basis for the limitation, “one business process robot,” in the claim at

lines 8 and 11. Claim 11 has hereby been amended by adding the phrase “autonomous retail” so that claim now appropriately recites “one autonomous retail business process robot” in both lines.

Applicant submits that this amendment forms a sufficient antecedent basis for this limitation in the claim by referring to “at least one autonomous retail business process robot” on line 6 of the claim. Therefore, Applicant respectfully requests reconsideration and withdrawal of this rejection.

### **Claim Rejections – 35 USC § 102**

Claim 11 was rejected for anticipation by U.S. Patent 5,310,997 to Roach. This rejection is traversed in view of the amendments above and remarks below.

Claim 11 recites, in combination with other elements, a retail store replenishment system having at least one autonomous retail business process robot, at least one autonomous distribution center business process robot, and at least one autonomous business process robot which communicates with each of said autonomous retail business process robot and said autonomous distribution center business process robot. As described by Applicant’s disclosure, the claim 11 arrangement allows for an “automatic business process management solution[] that [has the ability] to adapt [itself] to changing business conditions,” Specification, at p.2, line 2, through line 4, without needing human involvement to make expensive manual changes to the system. *See* Specification, at p. 1, line 19, through line 21.

The primary reference, Roach, discloses what appears to be a merchandise sale transactions system, which integrates sale and warehouse processing functions in order to facilitate the delivery of merchandise to costumers. Applicant respectfully submits that Roach does not disclose a retail store replenishment system that is autonomic in nature, having ability to function independently without human involvement, as is required in claim 11. Applicant’s invention incorporates entirely autonomic components and is itself an autonomic component. *See* Specification, at p. 5, line 5, through line 10. Roach’s invention fails to account for “changes due to changing business conditions or changing business goals [to] be managed by the system itself. [Rather, Roach’s system] will always require human intervention to reconfigure the system

manually.” Specification, at p.4, line 28, through, p. 5, line 2. While, Applicant’s invention creates “a truly adaptive system, which is self-managing (and thereby adaptive to changing business conditions) to limit the manual changes to a minimum.” Specification, at p. 5, line 2, through line 4.

Roach’s Figure 1 specifies an automated order and delivery system limited to use in a retail store, which houses the point of sale and merchandise warehouse in a single facility. This limitation of Roach’s inventions is further illustrated by Figure 2. Narrowing the system to a single facility, Roach’s invention, illustrated in Figures 1 and 2, are unrelated to the Applicant’s autonomic replenishment process.

Furthermore, Roach’s invention fails to incorporate a number of features incorporated into Applicant’s invention. These features include, but are not limited to, autonomously creating an updated execution plan based on notification and business goals, autonomously modifying business process to achieve business goals, and automatically adapting distributions process to changing business conditions.

Roach includes an inventory management function; however, column 17, line 27 through 31, explains that this function is restricted “to captur[ing] inventory adjustments.” Moreover, column 17, line 31 through 34 disclosed that upon collecting this information, Roach’s inventory management function only summarizes the collected information into daily reports and provides it to management. Therefore, Roach’s system fails to remove human involvement and does not have any mechanism to autonomously create an updated execution plan.

In Figure 6, Roach illustrates a warehouse inventory management and distribution system for the store. The distribution center system exemplified in Figure 6 tracks merchandise and directs work flow in the warehouse. As described by Applicant, the system shown in Figure 6 may be “represented by a collection of automatic [components], [but] does not make the business process itself autonomic. To allow for management of the business process from the outside, the collection of [autonomic components] has to be orchestrated by a managerial module” as required by Applicant. Specification, p. 6, line 27, through, p. 7, line 2. Therefore, Roach’s system fails to autonomously modify itself to achieve business goals.

In addition, Roach's system fails to automatically adapt the distributions process to changing business conditions. Column 7, line 1, through line 9, explains that Roach's general system only generates and sends summary information to each system. This general system does not make any automatic adaptations to changing business conditions. Roach's overall system is narrowed to communicating among each other without any autonomic regulation or adaptation. *See* Roach, column 4, line 65, through line 69; *See also* Roach, column 7, line 10, through line 12.

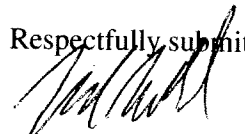
In view of the above, claim 11 is not anticipated by Roach and Applicant respectfully requests reconsideration and withdrawal of this rejection

### **Concluding Remarks**

In view of the foregoing, it is requested that the application be reconsidered, that claim 11 be allowed, and the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-0510 (IBM Yorktown).

Respectfully submitted,



Michael E. Whitham  
Reg. No. 32,635

Whitham, Curtis, Christofferson & Cook, P.C.  
11491 Sunset Hills Road, Suite 340  
Reston, VA 20190

Tel. (703) 787-9400  
Fax. (703) 787-7557

Customer No.: 30743